3.0 DEFINITIONS

Growth rate and productivity - The terms “population growth rate” and “population productivity” are interchangeable when referring to measures of population production over a Pacific salmon=s entire life cycle. Natural population replacement rate, replacement rate in the absence of hatchery-origin fish, per capita productivity at low population sizes, and trends in salmonid traits (e.g., fecundity of spawners) that affect population productivity are key to determining growth rate/productivity.

Hatchery - Facilities, equipment and operations at a specific location that support one or more artificial propagation programs.

Hatchery-origin - Fish from parents that were selected and spawned artificially.

Independent population – Populations that are reproductively isolated from other conspecific units and that have population dynamics that are substantially independent of other units.

Integrated propagation programs - Artificial propagation programs designed and operated to protect and promote population viability. Only natural-origin and hatchery-origin fish derived from the same population are used for broodstock. Use of other broodstock sources (e.g., to meet a production goal for numbers of fish produced by the program) is inappropriate. In some years, low run size may preclude reaching desired levels of natural-origin fish in the broodstock (a minimum of ten to twenty percent natural-origin fish in the broodstock is desirable). Captive broodstock programs and the reintroduction of fish into vacant habitats for conservation purposes are considered integrated propagation programs.

Interim abundance targets - Natural-origin fish abundance targets established by NMFS to provide a preliminary and general sense of Endangered Species Act recovery objectives. The targets represent geometric means of natural-origin spawner escapement over time scales of eight years or approximately two generations. Recovery goals based on viability criteria developed by Technical Recovery Teams will replace these targets. These viability criteria will also include genetic diversity, productivity, and spatial distribution requirements. (see Appendix B).

Isolated propagation programs - Artificial propagation programs that do not follow practices designed to protect or promote population viability. Fish in isolated programs are more likely to diverge genetically from natural populations included in an ESU, and to therefore themselves be excluded from the ESU.

Natural-origin - Fish from naturally spawning parents.

Pacific salmon - Any of the six species of the genus *Oncorhynchus* including *O. gorbuscha* (pink salmon), *O. keta* (chum salmon), *O. kisutch* (coho salmon), *O. nerka* (sockeye salmon), *O. tshawytscha* (chinook salmon), and the anadromous form of *O. mykiss* (steelhead).

Population - Populations are defined based on biological processes (i.e., reproductive isolation and demographic independence) and not based on geography or jurisdictional boundaries. A population (or independent population) must be sufficiently reproductively isolated from other conspecific units so that its population dynamics or risk of extinction is substantially independent.

Propagation program – An individual operation at a hatchery facility that produces a particular species or life-stage. A single hatchery facility can support one or multiple propagation programs.

Technical Recovery Team (TRT) - Expert technical team formed by NMFS to work with local interests and experts and ensure that TRT recommendations for delisting criteria are based on the most current and accurate technical information available.

Viable salmonid populations - A concept that identifies attributes (abundance, population growth rate, diversity, and spatial distribution) and provides guidance for determining the biological status of populations and larger-scale groupings of Pacific salmonids.